THE
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

AND

WASHINGTON STATE UNIVERSITY AGRICULTURAL RESEARCH CENTER

AND

UNIVERSITY OF IDAHO AGRICULTURAL EXPERIMENT STATION

AND

OREGON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

NOTICE OF NAMING AND RELEASE OF 'TRAILAR' WESTERN CLEMATIS, *Clematis ligusticifolia* Nutt.

'Trailar', Western Clematis, or Virgins-bower *Clematis ligusticifolia* Nutt., is a vegetatively propagated cultivar recommended for use as intermittent streambank protection and soil cover, for roadside and other critical area cover, and as ground cover for small mammals and upland birds. It has a wide range of adaptability being a proven performer on silt loam soils ranging from 9.9" *MAP* to 20.8" *MAP*.

'Trailar' is a native *Clematis* and being true to form of the species it is dioecious. Separate male and female plants flower abundantly through July and into August with white showy flowers which rarely exceed **2.5** cm in width.

'Trailar' consisting of both a male and female plant will have the capability to produce seed once established on a site. Seed from the female plant is attached to a lengthy white stvlus and in abundance appears cotton like in the fall when mature.

Due to its viny and climbing ability together with the snowy white flowers maturing to an attractive cotton-like mass each fall, it has potential for use in screening or landscaping particularly where a native species is desired. It is a deciduous perennial starting new growth in early April and shedding leaves in early November after each growing season.

'Trailar' can reproduce and develop new plants from seed if so desired but it is not considered weedy. 'Trailar" also layers from the nodes sending down new adventitious roots. This ability is increased by letting the plant trail on the ground rather than climb. Adding a mulching matter increases the layering ability.

ORIGIN: Both male and female plants of 'Trailar' were seed collections from native plants collected in the fall of 1977. The female plant originates from Walla Walla County, WA near Walla Walla. It was tested as accession T2980. The male plant originates from Benton County, WA, near Prosser. It was tested as accession T2981.

After testing, one outstanding maie plant and one outstanding female plant with similar growth form were selected to be 'Trailar:. These opposite gender plants were isolated in a 1988 planting and the seed collected in 1990 and proven viable through laboratory germination methods.

DESCRIPTION: 'Trailar' male and female plants are very comparable in phenotypic growth characteristics. Special features include strong, large diameter woody stems measuring 2.5 cm (1.0") or more near the plant crown. Each plant has long trailing vines of 3.0 - 3.5 m or more (10 - 12') depending on the site and growing conditions. The plants if left on the ground will matt to provide cover. Dormant ground cover at Pullman has approached *5.6* square meters (60 sq ft). Foliage abundance and density of 'Trailar' is excellent.

Both male and female plants have showy white flowers and both have stamens. The stamens of the female plant produce no pollen and as such are sterile. Recorded flower size of the female plant of 'Trailar' at Pullman is 2.6 cm and the male plant 1.9 cm. Each flower has four. petals. Flowers appear in clusters at the terminals of branching vines.

The fruit is truly an achene, villous to crisp-hairy with a style 2.5 - 5.0 cm in length. When mature the numberous fruiting bodies with intertangled styles give an attractive cotton-like appearance.

Leaves are pinnately compound with 5-7 narrow to broadly ovate leaflets. Average mature leaflet length recorded at Pullman is 4.6 cm and width 3.2 cm.

'Trailar' plants are very tolerant to cold, heat and drought. Disease has not been a problem. At Lind, WA a blister beetle infestation, Epicauta species defoliated plants in 1990.

ADAPTATION: 'Trailar' western *Clematis* is proven to be adapted to silt loam soils in MAP zones from 9.9" - 20.8". For (2) years 1989 and 1990, it has grown well on a Taunton fine sandy loam soil near Mattawa, WA with a *MAP* of 7.0". It has survived and performed well at the Squaw Butte Experiment Station near Burns, OR on a Holtle-Milcan soil complex (mixture of loam and fine sandy loam) with a MAP of 11.0".

Broadly it is adapted to most silt loam soils in MLRA's 6-12, 23-25 and 43-44. The species naturally occurs from British Columbia to southern California, east of the Cascade mountain range in Washington, but on both sides of the Cascades in the Columbia river gorge in Oregon, then east to the Dakotas and New Mexico.[1/]

Frequently it natively occurs in warm valleys along shrub or wooded areas or near fence rows which it uses for climbing.

1/ Hitchcock, C.L. and A. Cronquist. 1973. Flora of the Pacific Northwest. University of Washington Press, Seattle, WA 730 pp.

PERFORMANCE: The USDA, Soil Conservation Service has evaluated the performance of 'Trailar', and the species, at Pullman, Lind, Central Ferry and Mattawa, in Washington; Squaw Butte Experiment Station in Oregon and on a mine tailings site near Wallace, Idaho. An irrigated landscape planting at Aberdeen, ID has been performing with excellence.

A total of 45 accessions were planted in the original initial evaluation planting at Pullman, WA. The 'Trailar' male and female plants were selected based on survival, plant vigor, stem size and strength, abundance and density of foliage, matting and ground cover ability, and resistance to disease, cold, heat and drought.

At Pullman, WA spring green-up date begins near April 1, and leaf fall dormancy around November' 1. Both spring green-up and fall dormant dates are effected by the site and annual growing conditions.

PROPAGATION: 'Trailar' is vegetatively reproduced through softwood cuttings. Double leaf bud softwood cuttings 2.5 - 3.8 cm (1 - 1/2") in length treated with 0.3 Indole-butyric acid (IBA) will root in 15-20 days in a misting chamber. Parent plants for cuttings may be kept continousiy in a greenhouse to provide year round cutting stock. The genetic line of both gender plants will remain pure and unchanged.

Softwood propagated cuttings after rooting in a mist chamber are then transplanted to a suitable container for further root development. Rooted field transplants can be developed in a period of 60 days.

MATERIALS DISTRIBUTION The USDA, Soil Conservation Service, Plant Materials Center (PMC) Pullman, WA 99164 will maintain the genetic material and provide limited stock of rooted parent plants to be used for further softwood increase. Such parent stock will be available to coincide with release date.

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